

REMARKS

By the foregoing Amendment, Claims 1-3, 13, 15, 16, 26 and 27 have been amended. Favorable reconsideration of the application is respectfully requested.

A new sheet of drawings adding Figs. 3 and 4A, which were inadvertently omitted on filing of the application, is also submitted herewith. It is respectfully submitted that support for the addition of Figs. 3 and 4A can be found in the specification in the Brief Description of the Drawings, and at pages 5-9. It is respectfully submitted that no new matter has been added by the foregoing amendments. Upon approval of the addition of the new sheet of drawings by the Examiner, Applicant proposes to submit new formal drawings including the additional sheet of drawings.

Claims 1-4, 7-10, 13-17, 20-23, 27, 28 and 31-35 were rejected under 35 U.S.C. 102(b) on the grounds of anticipation by Briles, disclosing a self-sealing nut assembly with a deformable sealing insert 16, and a captive washer 14 that fits over the sealing insert and the base of the nut body. As is explained in Briles at column 6, line 62 to column 8, line 11, the deformable sealing material of the insert fills a cavity 68 and overflows into pressure control gates 52, forming radial nibs 70 of sealing material, so that the sealing material will not stay on the bolt up against the structure, allowing for reuse of the nut assembly. As is illustrated in Figs. 1 and 2, in the present invention, the sealing insert is disposed entirely within the swage collar when the swage collar and fastener are installed on a workpiece, and as is shown in Fig. 2, the sealing insert interfaces with the threaded or grooved section 15 of the pin. It is respectfully submitted

that this construction provides for improved sealing of the connection of the fastener to a workpiece, such as parts of aircraft fuel tanks.

Claim 1 recites “an internal sealing insert adapted to be disposed entirely in the swage collar over the fastener when installed on said composite assembly of workpieces.” Independent Claims 13, 26 and 27 have been similarly amended. It is respectfully submitted that Briles does not teach, disclose or suggest an internal sealing insert adapted to be disposed entirely in a swage collar over a fastener when installed on an assembly of workpieces, as is claimed.

It is further noted that in Briles, as is depicted in Figs 2 and 4, the nut does not contact the workpiece when the fastener is installed on the workpiece, but rather the captive washer, which retains overflow sealing material in the overflow channels of the nut, contacts the workpiece. Claim 2 has been amended to recite “the base portion adapted to contact said assembly of work pieces.” Claim 3 has also been amended to recite “wherein said internal sealing insert is flush with said base portion when installed on said composite assembly of workpieces.” Claims 15, 16, 26 and 27 have been similarly amended. It is respectfully submitted that Briles does not teach, disclose or suggest a base portion of a swage collar contacting an assembly of work pieces when installed, or an internal sealing insert that is flush with a base portion of a swage collar when installed on an assembly of workpieces, as is claimed. It is therefore respectfully submitted that Claims 1-4, 7-10, 13-17, 20-23, 27, 28 and 31-35 are novel and inventive over Briles, and that the rejection of Claims 1-4, 7-10, 13-17, 20-23, 27, 28 and 31-35 on the grounds of anticipation by Briles should be withdrawn.

Claims 26-28, 31, 33 and 34 were rejected under 35 U.S.C. 103(a) on the grounds of obviousness from Briles in view of Armour. It is respectfully submitted that Briles and Armour, either when taken individually or together, do not teach, disclose or suggest an internal sealing insert adapted to be disposed entirely in a swage collar over a fastener when installed on an assembly of workpieces, as is claimed. It is therefore respectfully submitted that Claims 26-28, 31, 33 and 34 are novel and inventive over Briles and Armour, and that the rejection of Claims 26-28, 31, 33 and 34 on the grounds of obviousness from Briles in view of Armour should be withdrawn.

Claims 5, 6, 18, 19, 29 and 30 were rejected under 35 U.S.C. 103(a) on the grounds of obviousness from Briles in view of Armour, and further in view of Rath. It is respectfully submitted that Briles, Armour, and Rath, either when taken individually or together, do not teach, disclose or suggest an internal sealing insert adapted to be disposed entirely in a swage collar over a fastener when installed on an assembly of workpieces, as is claimed. It is therefore respectfully submitted that Claims 5, 6, 18, 19, 29 and 30 are novel and inventive over Briles, Armour, and Rath, and that the rejection of Claims 5, 6, 18, 19, 29 and 30 on the grounds of obviousness from Briles in view of Armour and further in view of Rath should be withdrawn.

Claims 11, 12, 24 and 25 were rejected under 35 U.S.C. 103(a) on the grounds of obviousness from Briles in view of Breed. It is respectfully submitted that Briles and Breed, either when taken individually or together, teach, disclose or suggest an internal sealing insert adapted to be disposed entirely in a swage collar over a fastener when installed on an assembly of workpieces, as is claimed. It is therefore respectfully

submitted that Claims 11, 12, 24 and 25 are novel and inventive over Briles and Breed, and that the rejection of Claims 11, 12, 24 and 25 on the grounds of obviousness from Briles in view of Breed should be withdrawn.

Applicant has reviewed the additional prior art made of record and not relied upon, and it is believed that the additional prior art made of record and not relied upon is no more pertinent than the reference actually applied.

In light of the foregoing amendments and remarks, it is respectfully submitted that the application should now be in condition for allowance, and an early favorable action in this regard is respectfully requested.

Respectfully submitted,

FULWIDER PATTON LEE & UTECHT, LLP

By: 

James W. Paul
Reg. No. 29,967

JWP/rvw

Encls.: Return Postcard

Drawing Sheet for Figs. 3 and 4A

Howard Hughes Center
6060 Center Drive, Tenth Floor
Los Angeles, CA 90045
Telephone: (310) 824-5555
Facsimile: (310) 824-9696
Customer No. 24201